BRUHAT BENGALURU MAHANAGARA PALIKE

Name of work : *Cement concreting to roads and drains in Chikkabettahalli Aishwarya bakery road and surroundings roads in Attur ward No.03 of Yelahanka Sattelite Town Sub-division*

Estimate Cost:Rs. 4900000.00

Sl No	Description of work	No	Dimensions L	B	D	Quantity	Rate	Unit	Amount
1	2	3	4	5	6	7	8	9	10
1	KSRRB 500-2 Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and/or compressed air to recieve bituminous treatmement including cost of all materials labour, HOM machineries, complete as per specifications MORTH / Chapter 5 **(P-175, It;21.2)**								
	Basic Rate	2.40							
	Area Weightage 6%	0.19							
	Total	**2.59**							
	Aishwarya layout main road	1	220.00	4.00		880.00			
					Total	880.00	2.59	Sqm	2281.00
2	KSRB 2-2.2Earth work excavation for foundation of building water supply sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width in **hardsoil** not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications. **(P-5, It,-2.4)**								
	Basic Rate	211.00							
	Area Weightage 8%	16.88							
	Total	**227.88**							
	Main road for SSM drain	2	220.00	1.60	0.90	633.60			
	Kerb	2	220.00	0.20	0.20	17.60			
	Culvert	2	6.00	1.60	1.00	19.20			
					Total	670.40	227.88	Cum	152771.00
3	KSRB 2-1.1 Earthwork in surface excavation in hard soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled and after breaking of clods and neatly dressed as per specification Specification No. KBS 2.1(a)/2.3.1 **(P-5 It,2.2)**								
	Basic Rate	164.00							
	Area Weightage 8%	13.12							
	Total	**177.12**							
	Shoulders								
	Main road for Asphalt	2	220.00	1.00	0.30	132.00			
					Total	132.00	177.12	Cum	23380.00

4	KSRRB M400-17:Providing, laying, spreading and compacting graded stones aggregate to Wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specification MORTH Specification N0 406 **(P-166 It,20.18)** Basic Rate 1038.00 Area Weightage 8% 83.04 **Total 1121.04**								
	Main road	2	220.00	1.00	0.25	110.00			
					Total	**110.00**	**1121.04**	**Cum**	**123314.00**
5	KSRRB M500-6:Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.60 Kg/sqm using maechanical means complete as per specifications. Morth Specification No. 502 **(P-175, It.21.6)** Basic Rate 41.00 Area Weightage 8% 3.28 **Total 44.28**								
	Main road	2	220.00	1.00		440.00			
					Total	**440.00**	**44.28**	**Sqm**	**19483.00**
6	KSRRB 500-10:Tack coat:Providing and applying tack coat with bitumen emulsion pressure distributor at the rate of 0.20 Kg per sqm on the prepared bituminous/granular surface cleaned with mechanical broom complete as per specifications MORTH Specification No.503 using bitumen emulsion **(P-176, It,21.10.1)** Basic Rate 11.10 Area Weightage 8% 0.89 **Total 11.99**								
	Main road	1	220.00	6.00		1320.00			
					Total	**1320.00**	**11.99**	**Sqm**	**15824.00**
7	KSRRB M500-13: Providing and laying bituminous macadam 50mm thick with 100-120 TPH hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bitimnous binder, transported to site, laid over a previously prepared surface with paver finisher to the requred grade, level and alignment and rolled as per Clauses 501.6 and 501.7 to achieve the desired compaction complete as per specifications Mother specification No.504 , 50-75mm compacted thickness (grading II)with 3.3% bitumen **(P-177, It.21.13.2)** Basic Rate 6174.00 Area Weightage 8% 493.92 **Total 6667.92**								
		1	220.00	6.00	0.050	66.00			
					Total	**66.00**	**6667.92**	**Cum**	**440083.00**

8 *KSRRB M500-19 Providing and laying bituminous concrete 30-45mm compacted thickness with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler,transporting the hot mix to work site, laying with hydrostatic paver finisher with sensor control to required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No.500.9 complete in all respects as per specification 30-45mm compacted thickness (Grading II) with 6% bitumen 60/70* ***(P-179, It,21.22.2)***

Basic Rate	10604.00							
Area Weightage 8%	848.32							
Total	**11452.32**							
	1	220.00	6.00	0.040	52.80			
				Total	**52.80**	**11452.32**	**Cum**	**604682.00**

9 *KSRRB M800-13 .1 Providing and laying of hot applied themoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from sreaks and holes complete as per specifications MORTH Specification No 803including cost of materials, labour, complete as per specifications* ***(P-197, It.No.24.15)***

Basic Rate	437.00							
Area Weightage 8%	34.96							
Total	**471.96**							
					44.00			
Road	2	220.00	0.10					
				Total	**44.00**	**471.96**	**Sqm**	**20766.00**

10 *KSRB 4-1.3 Providing and laying in position plain cement concrete of mix M7.5 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregate @0.85 cum and fine aggregate @0.57 cum machine mixed, concrete laid in layers not exceeding 15 cms. thick well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications Specification No KBS 4.1, 4.2* ***(P-12, It.4.3)***

Basic Rate	3973.00							
Area Weightage 8%	317.84							
Total	**4290.84**							
					105.60			
SSM drain	2	220.00	1.60	0.15				
					2.88			
Culvert	2	6.00	1.60	0.15				
				Total	**108.48**	**4290.84**	**Cum**	**465470.00**

11 *Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6 stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications* ***(P-25, It5.6)***

	4	220.00	0.45	0.60	237.60			
				Total	**237.60**	**3484.22**	**Cum**	**827851.00**

Basic Rate 3287.00

	A.W @ 6%	197.22						
	Total	**3484.22**						
	Providing ruled pointing of coursed stone masonry with Cement mortar 1:3 20mm deep, after raking joints to depth of 20mm necely lining, including cost of materials, abour, HOM of machineries curing etc., complete as per specification and directions of the Engineer-in-charge ***(P-122, It.15.3)***							
		4	220.00		0.60	528.00		
					Total	**528.00**	**78.44**	**Cum**	**41416.00**
	Basic Rate	74.00						
	A.W @ 6%	4.44						
	Total	**78.44**						
13	*KSRB 4-1.6:Providing and laying in position plain cement concrete of mix M15 with cement @240kgs with 20mm and down size graded granite metal coarse aggregate @0.879cum and fine aggregate @0.459 cummachine mixed, concrete laid in layers not exceeding 15 cms thick well compacted in foundation, plinth and cills including cost of all materials, labour, HOM of machinery, curing complete as per specifications.* ***(P-12, It.4.6)***							
	Basic Rate:	4425.00						
	Area Weightage 8%	354.00						
	Total	**4779.00**						
	For coping	4	220.00	0.45	0.10	39.60		
	for vent	2	220.00	0.50	0.10	26.40		
	below kerb	2	220.00	0.20	0.10	8.80		
					Total	**74.80**	**4779.00**	**Cum**	**357469.00**
14	*Providing and fixing 10 cm thick pre cast RCC covering slab using reinforced cement concrete M 20 mix with stone aggregate 20 mm and down size including centring shuttering reinforcement and bar bending machine mixed concrete laid in layers not exceeding 15 cm thick wellcopacted cost of all materials labour curing comlete as per specification (Data Rate Approved)*							
	Data Rate	**1498.00**						
	covering slab							
		2	220.00	1.20		528.00		
					Total	**528.00**	**1498.00**	**Sqm**	**790944.00**
15	*KSRB 4.2.2:Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs. with 20mm and down size graded granite metal coarse aggregates @0.878 cum and fine aggregates @ 0.459 cum, with superplastisiser @ 3lts confiming to IS 9103-1999 Reaffirmed -2008, machine mixed, concrete laid in layres not exceeding 15 cms. thick vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase,lintles retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills fillets etc, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No.KBS 4.1, 4.6* ***(P-13, It.4.11)***							
	Basic Rate:	5222.00						

Area Weightage 8%	417.76							
Total	**5639.76**							
culvert bottom slab	2	6.00	1.50	0.20	3.60			
side wall	4	6.00	0.30	0.60	4.32			
covering slab	2	6.00	1.50	0.23	4.14			
ramp	4	6.00	0.20	0.10	0.48			
					12.54	**5639.76**	**Cum**	**70723.00**

16 KSRB 4.9-1:Providing T.M.T Steel reinforcement for RCC Work including straightening, cutting, bending hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wasstge shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications Specification No.KBS 4.6.3 **(TMT bars Fe 415 P-19, It.4.46)**

Basic Rate	6634.00							
Area Weightage 8%	546.72							
Total	**7380.72**							
Qty @ 100kg per cum		1			12.54			
				Total	**12.54**	**7380.72**	**Qntl**	**92554.00**

17 KSRB 4.6.4:Providing and removing centering, shuttering, strutting propping etc, and removal of formwork for Vertical surface such as walls at any thickness including attached pilasters butresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No KBS 4.6.2 **(P-17, It.4.31)**

Basic Rate	251.00							
Area Weightage 8%	20.08							
Total	**271.08**							
culvert side wall	8	6.00		0.60	28.80			
covering slab	2	6.00	0.90		10.80			
	4	6.00		0.23	5.52			
	4	1.50		0.23	1.38			
				Total	**46.50**	**271.08**	**Sqm**	**12605.00**

18 5.29(b) Providing and fixing Pre cast solid cement concrete kerb stones made out of C.C 1:2:4 with toop and bottom wideth 114 and 165 mm respectively 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading lead and lift transportatin etc, complete. **(P-28, It.No.5.30)**

Basic Rate	248.00							
Area Weightage 8%	19.84							
Total	**267.84**							
		2	220.00		440.00			
				Total	**440.00**			
		440.00	/0.45	**Say**	**978**	**267.84**	**Nos**	**261888.00**

19	KSRRB 15-19.1 Providing and applying ready mix priming coat over concrete/ masonry/asbestos cement sheet/ plastered surfaces including preparing the surface after thoroughly cleaning of oil grease, dirt and other foreign matter, and sand preparing including cost of materials labour complete as per specifications. **(P-129, It.No.15.80)** Basic Rate 22.00 Area Weightage 8% 1.76 **Total 23.76**					
		2	220.00	0.45	198.00	
				Total	198.00	23.76 Sqm 4704.00
20	KSRRB 15-20.1 Providing and applying floor painting with redy mix paint in **two coats** (excluding priming coat) on new concret / asbestos cement sheet / plastered surfaces brushing to give an even shade gafter preparing the surface after throughly cleaning oil, diert, dust other foreign matter and sand preparing including cost of materials, labour, complete as per specifications. **(P-131, It.No.15.83)** Basic Rate 41.00 Area Weightage 8% 3.28 **Total 44.28**					
		Qty same as above			198.00	
				Total	198.00	44.28 Sqm 8767.00
21	KSRRB M100-1 Loading and unloading of stone boulder/stone aggregates/sand/ kanker/moorum. KSRRB M100-1 Placing in tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications. MORTH Chapter 1 **(P-150, It.17.1)** Basic Rate 62.20 Conveying for 10 km 25.60 sub total 87.80 Area Weightage 8% 7.02 **Total 94.82**					
	Qty Vide Item No.2				670.40	
	Qty Vide Item No.3				132.00	
				Total	802.40	94.82 Cum 76087.00
						TOTAL 4413062.00
22	Add KRIDL Charges 11%					485436.82
23	Miscellaneous & Rounding off					L/S 1501.18
						Total Rs: 4900000.00

Rupees Fourty Nine Lakh only

P 2654

Sanction for Rs. 49.00 Lac Fourty Nine Lakh only

is accorded under head P 2654

registered as CE No ..... Subject

to Conditions contained in enclosed memo

No. CE/Tech/AA/816/13-14 dt. 5-2-14

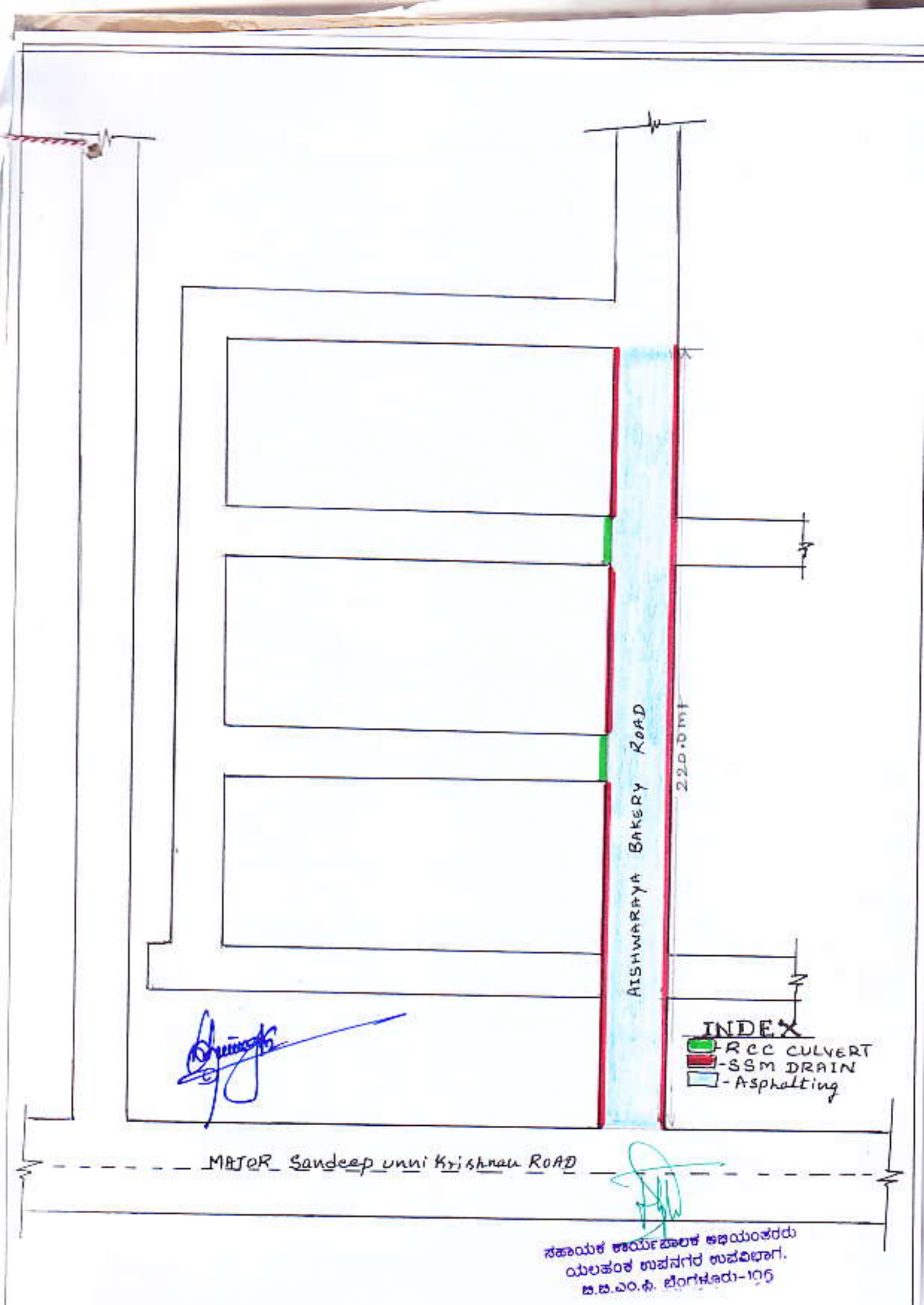
CERTIFICATE

1. The work spot comes under BBMP Limits
2. The provisions made in the estimate are necessary and minimum
3. The estimate is based on CSR of PWD 2013-14

Assistant Engineer
Ward No.3

Assistant Executive Engineer
Yelahanka Sattelite Town Sub-Division
Bruhat Bengaluru Mahanagara Palike

Executive Engineer
Yelahanka Division
ruhat Bengaluru Mahanagara Palik



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